1977

OPERATING INSTRUCTIONS

Cornell-Dubilier

DECADE RESISTORS

MODELS RDA-RDB-RDC

CORNELL-DUBILIER ELECTRIC CORPORATION

SOUTH PLAINFIELD, N. J., U.S.A. CABLE ADDRESS: CORDU

Other Plants in New Bedford, Worcester and Cambridge, Mass.; Providence and Hope Valley, R. I.; Indianapolis, Ind.; Sanford and Fuquay Springs, N. C.; Venice, Calif.; and Subsidiaries, The Radiart Corp., Cleveland, Ohio; and Cornell-Dubilier Electric International Corp.

CORNELL-DUBILIER CD CAPACITORS

GUARANTEE

This DECADE RESISTOR is guaranteed to perform as described and to be free from any defects in materials or workmanship. Any failure due to these causes will be adjusted by repair or replacement without charge if the instrument is returned prepaid to our factory within 90 days from date of purchase.

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Cornell-Dubilier
Electric Corp.

Cornell-Dubilier
DECADE RESISTORS
Models RDA-RDB-RDC

SPECIFICATIONS

MODEL RDA

Resistance Range: 1 to 110 ohms (in steps of 1 ohm).

	1-10 Ohm Range	10-100 Ohm Range
Current Rating — Max.	1.0 Amp.	0.5 Amp.
Tolerance	±5%	±3%
Resistance Elements	Wire Wound	Non-Ind. Wire Wound

Case Size — 3⅝" x 5" x 3"
Weight — 1 lb., 5 oz.
User's Net Price $12.15

MODEL RDB

Resistance Range: 100 to 11,000 ohms (in steps of 100 ohms).

	100-1000 Ohm Range	1000-10,000 Ohm Range
Current Rating — Max.	100 Ma.	50 Ma.
Tolerance	±3%	±3%
Resistance Elements	Non-Ind. Wire Wound	Non-Ind. Wire Wound

Case Size — 3⅝" x 5" x 3"
Weight — 1 lb., 5 oz.
User's Net Price $12.50

MODEL RDC

Resistance Range: 10,000 to 1,100,000 ohms (in steps of 10,000 ohms).

	10,000-100,000 Ohm Range	100,000-1,000,000 Ohm Range
Current Rating — Max.	5 Ma.	2 Ma.
Tolerance	±1%	±1%
Resistance Elements	Carbon Precision	Carbon Precision

Case Size — 3⅝" x 5" x 3"
Weight — 1 lb., 5 oz.
User's Net Price $12.50

GENERAL

C-D Decade Resistors provide a reliable source of resistance for substitution purposes in a wide variety of electronic and electrical applications within the current and resistance rating of each unit. Units of resistance are selected from the direct reading panel switch scale.

Each instrument permits a possible selection of 110 resistance values. For example: On Model RDA, left hand switch at "3" and right hand switch at "70" would provide a resistance value of 73 ohms (3 + 70) etc.

When the two switches are set at "0" all resistors in the Decade are short-circuited and the resistance value across the terminals of the box is "0".

PROCEDURE

A. Set both switches to highest resistance value position or to approximate resistance value desired.

B. Connect test leads to binding post terminals and into the circuit at the point where the test substitution is to be made.

C. Set switch or switches to desired resistance or combination of resistance until the circuit under test performs as desired. The resistance value may then be read directly from the scales.

CAUTION:

Observe current limitations. Do not subject the instrument to values in excess of the current rating shown on the specification chart attached to bottom of the Decade Box or as shown on Page 3 of this booklet.

SERIES CONNECTED DECADES

C-D Decade Resistors may be used individually or may be connected in series combinations to provide a range of values to 1,111,110 ohms in steps of 1 ohm.

For example:

Models RDA and RDB connected in series will have a range of from 1 to 11,110 ohms in steps of 1 ohm.

Models RDA, RDB and RDC connected in series will have a range of from 1 to 1,111,110 ohms in steps of 1 ohm.

Other obvious combinations of these Decades will provide a flexible arrangement suitable to the special limits of any requirement within their range.

CIRCUIT DIAGRAM — ALL MODELS

Switches viewed from rear.
"D" denotes dummy lugs which serve as support for resistors only.

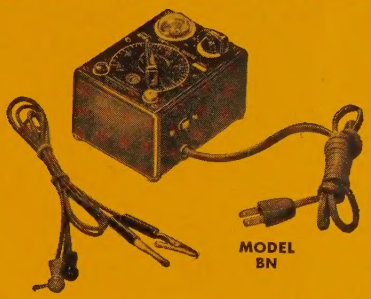
Models RDA — RDB — RDC

PARTS LIST

	C-D PART No.		
	RDA	RDB	RDC
Case (less Base Plate and Panel)	20826	Same	Same
Base Plate	20827	Same	Same
Front Panel	34802	34803	34804
Switch (2)	34806	Same	Same
Switch Knob (2)	20833	Same	Same
Terminal Binding Post (2)	20832-A	Same	Same
Rubber Foot (4)	20834	Same	Same
¼" - 4/36 Panel Screw (6)	34678	Same	Same
½" - #4 Base Plate Screw (4)	22393	Same	Same
Resistors:			
R1 1 ohm 5% 10W	34807		
R2 2 ohms 5% 10W	34808		
R3 3 ohms 5% 10W	34809		
R4 4 ohms 5% 10W	34810		
R5 10 ohms 3% 10W	34811		
R6 20 ohms 3% 10W	34812		
R7 30 ohms 3% 10W	34813		
R8 40 ohms 3% 10W	34814		
R1 100 ohms 3% 10W		34815	
R2 200 ohms 3% 10W		34816	
R3 300 ohms 3% 10W		34817	
R4 400 ohms 3% 10W		34818	
R5 1K ohms 3% 10W		34819	
R6 2K ohms 3% 10W		34820	
R7 3K ohms 3% 10W		34821	
R8 4K ohms 3% 10W		34822	
R1 10K ohms 1% 2W			34823
R2 20K ohms 1% 2W			34824
R3 30K ohms 1% 2W			34825
R4 40K ohms 1% 2W			34826
R5 100K ohms 1% 2W			34827
R6 200K ohms 1% 2W			34828
R7 300K ohms 1% 2W			34829
R8 400K ohms 1% 2W			34830

CORNELL-DUBILIER CAPACITOR BRIDGE - Model BN and CAPACITOR DECADES

MODEL BN CAPACITOR BRIDGE

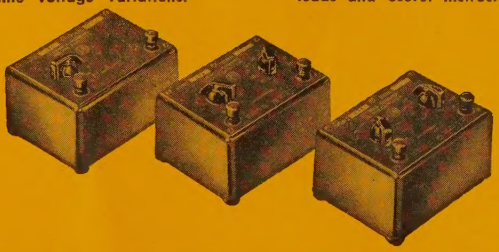


MODEL BN

Net Price Complete With Tubes $24.95

FEATURES OF MODEL BN CAPACITOR BRIDGE

1. Measures Capacity—Accurately measures capacity of paper, mica, electrolytic and air capacitors from .00001 mfd. to 50 mfds.
2. Indicates Power Factor—Power factor of electrolytic capacitor indicated by means of visual eye detector tube.
3. Detects Defective Capacitors—Detects open and short circuits, high and low capacity, and high power factor.
4. Checks Circuit Continuity—May be used as continuity meter. A handy instrument for checking circuits, coils, transformers and many other uses. For operation on 110 volts, 60 cycles.
5. Employs Wien Bridge—Employs Wien Bridge circuit for all measurements. Accuracy independent of line voltage variations.
6. Visual Eye Bridge Balance—Dual type visual bridge balance for accurate measurements facilitates quick tests on service jobs.
7. Direct Reading Scale—Direct reading ranges will all scale markings directly in microfarads. Clear reading dial scale. All capacity calibrations marked on panel. No charts or multipliers required.
8. Self-Contained—The Capacitor Bridge is complete in itself and requires no headphones, standards, external meters, etc.
9. Extremely Compact—The unusually small size of this bridge makes it particularly handy for portable use—3⅝" x 5" x 3" weight 2 lbs.
10. Attractive —Supplied in attractive walnut Bakelite case complete with detachable test leads and useful instruction booklet.



CORNELL-DUBILIER CAPACITOR DECADES provide a reliable and accurate source of measured capacitances for substitution purposes in a wide variety of electronic applications within the voltage and capacitance ratings of each unit.
Units of capacitance can be selected from the direct reading switch scale markings and the precise value may be read directly from the hand calibrated chart provided with each instrument.

CORNELL-DUBILIER CAPACITOR DECADES may be grouped in parallel to provide a wide range of accurate standards with maximum flexibility. For example, one each of decades CDA, CDB and CDC in parallel will permit a selection of capacitances from 0 to 11.111 mfds., in steps of .0001 mfd.
Five C-D Decade models are available with ratings and tolerances as shown below:

From Your CORNELL-DUBILIER DISTRIBUTOR

Rated Voltage - 600 D.C. - 220 A.C.

Model	Capacity	+ or − Tol.	Dielectric	Net Price
CDA-5	.011 mfd. in .0001 mfd. steps	5%	Mica	$11.35
CDB-5	1.1 mfd. in .01 mfd. steps	5%	Oil-Paper	11.35
CDB-3	1.1 mfd. in .01 mfd. steps	3%	Oil-Paper	13.50
CDC-5	10.0 mfd. in 1.0 mfd. steps	5%	Oil-Paper	19.95
CDC-3	10.0 mfd. in 1.0 mfd. steps	3%	Oil-Paper	22.00

CAPACITOR-RESISTOR BRIDGE

MODEL BF-60

This is the latest Capacitor-Resistor Bridge designed and built by C-D to quickly and accurately measure the important characteristics of substantially all types of Capacitors and Resistors. It detects capacitor defects such as OPENS and SHORTS; INTERMITTENTS, HIGH and LOW CAPACITIES; HIGH LEAKAGE and POWER FACTOR of Electrolytic Capacitors, as well as INSULATION RESISTANCE of Paper, Mica and Ceramic Dielectric Capacitors. Operates from 110 - 125 VAC 50 - 60 Cycles.

Range: .00001 to 1000.0 MFD.
100 to 5,000,000 Ohms.

MODEL BF-60 CAPACITOR-RESISTOR BRIDGE
NET PRICE complete with tubes **$42.85**

FLYBACK TRANSFORMER & YOKE CHECKER

MODEL BF-80

The Cornell-Dubilier Flyback Transformer and Yoke Checker provides the television serviceman with a rapid and convenient means of locating defects in flyback transformers and yokes. This instrument is extremely sensitive and will immediately detect a **single** short circuited turn in the windings of either a flyback transformer or yoke. Without the use of such an instrument as the Cornell-Dubilier Flyback Transformer and Yoke Checker, it is most difficult to detect such a defect. Resistance measurements are not effective because a short circuited turn causes only a minute change in resistance and usually the resistance of a good transformer or yoke is unknown and subject to a wide tolerance. A short circuited turn on the other hand, causes a major change in inductance, which this instrument quickly detects.

In addition to detecting short circuited turns in magnetic windings, this instrument is designed to also provide a means for quickly detecting OPEN CIRCUITED conditions in transformers, yokes, coil and switches, or short circuited elements in vacuum tubes.

MODEL BF-80 CHECKER
NET PRICE complete with tube **$46.45**

From Your CORNELL-DUBILIER DISTRIBUTOR